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10/649,903	08/26/2003	Mahesh A. Ramchandani	5150-77400	5752

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EXAMINER

MITCHELL, JASON D

ART UNIT	PAPER NUMBER
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2193

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.	Applicant(s)	
10/649,903	RAMCHANDANI, MAHESH A.	
Examiner	Art Unit	
Jason Mitchell	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/1/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-75 are pending in this application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 2-3, 14, 32, 43, 57-58, 71 and 73 are rejected under 35**

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Regarding Claims 2-3, 32, 57-58, 71 and 73:** Given the broadest reasonable interpretation, using a development environment to configure an application to perform a first functionality constitute 'programming the application to perform that first functionality. Consequently, it is unclear exactly what limitation Applicant intends the claims to represent.

5. **Regarding Claims 14, 43:** The claims recite, "the control comprises a standalone software component". The exact scope of this term is unclear, and Examiner found no further explanation in the disclosure.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 70-74 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,485,617 to Stutz et al. (Stutz).**

8. **Regarding Claim 70:** Stutz discloses a computer-implemented method for creating a software application (col. 10, lines 38-39 “visual programming environment”), the method comprising:

including a GUI element in the application in response to user input (col. 10, lines 46-48 “specifies the visual components and their location on the display”);

including a control in the application in response to user input (col. 10, lines 46-48 “specifies the visual components and their location on the display”), wherein the control includes pre-existing first functionality (col. 10, lines 42-45 “a list of predefined components (objects) that can be interconnected”; col. 11, lines 11-17 “code for updating the list of files”); and

configuring a binding between the GUI element and the control (col. 11, lines 11-17 “the output port 516 of the open file dialog box object 503 has been connected to the input port 517 of the code object 504”);

wherein the GUI element is operable to receive user input during execution of the application (col. 11, lines 37-40 “the open file dialog box operates by responding to ... events raised from user input”);

wherein said configuring the binding between the GUI element and the control enables the control to automatically perform the first functionality in response to the user input received to the GUI element (col. 11, lines 42-52 “Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509”).

9. **Regarding Claim 71:** The rejection of claim 70 is incorporated; further, Stutz discloses:

said configuring the binding between the GUI element and the control enables a user to configure the application to perform the first functionality in response to user input received to the GUI element without requiring the user to program the application to perform the first functionality (col. 10, lines 42-45 “a list of predefined components (objects) that can be interconnected”).

10. **Regarding Claim 72:** Stutz discloses a computer-implemented method for creating a software application (col. 10, lines 38-39 “visual programming environment”), the method comprising:

including a GUI element in the application in response to user input (col. 10, lines 46-48 “specifies the visual components and their location on the

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display”), wherein the GUI element is operable to display information (col. 11, lines 11-15 “multiple selection list box object 509”);

including a control in the application in response to user input (col. 10, lines 46-48 “specifies the visual components and their location on the display”), wherein the control includes pre-existing first functionality (col. 10, lines 42-45 “a list of predefined components (objects) that can be interconnected”), wherein the first functionality includes functionality for generating first information (col. 11, lines 11-17 “code for updating the list of files”); and

configuring a binding between the GUI element and the control (col. 11, lines 15-17 “the input port 511 of the multiple selection list box object 509 has been connected to the output port 518 of the code object 503”);

wherein said configuring the binding between the GUI element and the control enables the GUI element to automatically display the first information when the control performs the first functionality during execution of the application (col. 11, lines 42-52 “Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509”).

11. **Regarding Claim 73:** The rejection of claim 72 is incorporated; further Stutz discloses:

wherein said including the control in the application enables a user to configure the application to perform the first functionality without requiring the

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user to program the application to perform the first functionality (col. 10, lines 42-45 "a list of predefined components (objects) that can be interconnected");

wherein said configuring the binding between the GUI element and the control enables the user to configure the application to display the first information without requiring the user to program the application to display the first information (col. 11, lines 5-11 "Using the various commands provided by the buttons in the command area 502").

12. Regarding Claim 74: Stutz discloses a computer-implemented method for creating a software application (col. 10, lines 38-39 "visual programming environment"), the method comprising:

including a first GUI element in the application (col. 10, lines 46-48 "specifies the visual components and their location on the display"), wherein the first GUI element is operable to receive user input during execution of the application (col. 11, lines 37-40 "the open file dialog box operates by responding to ... events raised from user input");

including a second GUI element in the application (col. 10, lines 46-48 "specifies the visual components and their location on the display"), wherein the second GUI element is operable to display information during execution of the application (col. 11, lines 11-15 "multiple selection list box object 509");

including a control in the application (col. 10, lines 46-48 "specifies the visual components and their location on the display"), wherein the control includes pre-existing first functionality (col. 10, lines 42-45 "a list of predefined

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components (objects) that can be interconnected”), wherein the first functionality includes functionality for generating first information (col. 11, lines 11-17 “code for updating the list of files”);

configuring a binding between the first GUI element and the control (col. 11, lines 11-17 “the output port 516 of the open file dialog box object 503 has been connected to the input port 517 of the code object 504”);

configuring a binding between the second GUI element and the control (col. 11, lines 15-17 “the input port 511 of the multiple selection list box object 509 has been connected to the output port 518 of the code object 503”);

wherein said configuring the binding between the first GUI element and the control enables the control to automatically perform the first functionality in response to the user input received to the first GUI element during execution of the application, wherein said performing the first functionality includes generating the first information (col. 11, lines 37-40 “the open file dialog box operates by responding to ... events raised from user input”);

wherein said configuring the binding between the second GUI element and the control enables the second GUI element to automatically display the first information when the control performs the first functionality in response to the user input received to the first GUI element (col. 11, lines 42-52 “Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509”).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 1-18, 20-47 and 49-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,485,617 to Stutz et al. (Stutz) in view of US 6,401,220 to Grey et al. (Gray).**

15. **Regarding Claims 1, 31, 53-55:** These claims recite methods for creating software applications as recited in claims 70, 72, and 74, with the exception that the methods recited in claims 1, 31 and 53-55 are used to "create a test executive application to perform a test executive function".

16. Gray teaches that such test executive applications were known in the art (Title "Test Executive System and Method").

17. It would, at least, have been obvious to a person of ordinary skill in the art at the time of the invention to use the method disclosed in Stutz to create a test executive application to perform a test executive function as taught by Gray (Abstract "A test executive program which provides ... execution of test

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sequences”) because Stutz discloses an improved method ... for dynamically generating object connections” (col. 8, lines 14-17).

18. **Regarding Claims 56, 63, and 69:** These claims recite methods for creating software applications as recited in claims 70, 72, and 74, with the exception that the methods recited in claims 56, 63 and 69 are used to create “a measurement application to perform a measurement function”.

19. Gray teaches such Measurement applications were know in the art (col. 11, lines 36-40 “a data acquisition and control application ... a test and measurement application”).

20. It would, at least, have been obvious to a person of ordinary skill in the art at the time of the invention to use the method disclosed in Stutz to create a measurement application to perform a measurement function (col. 11, lines 36-40 “a test and measurement application”) because Stutz discloses an improved method ... for dynamically generating object connections” (col. 8, lines 14-17).

21. **Regarding Claims 2, 32, 57:** The rejection of claim 1, 31, 56 are incorporated respectively; further Stutz discloses:

said configuring the binding between the GUI element and the control enables a user to configure the application to perform the first functionality in response to user input received to the GUI element without requiring the user to

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program the application to perform the first functionality (col. 11, lines 5-11

"Using the various commands provided by the buttons in the command area 502").

22. Regarding Claims 3 and 58: The rejection of claims 1, 56 are incorporated, respectively; further

wherein said configuring the binding between the GUI element and the control enables a user to configure the application to perform the first functionality in response to user input received to the GUI element without requiring the user to program the application to respond to user input received to the GUI element (col. 11, lines 5-11 "Using the various commands provided by the buttons in the command area 502").

23. Regarding Claims 4, 33, 59: The rejections of claims 1, 31, 56 are incorporated, respectively; further

Stutz discloses said configuring the binding between the GUI element and the control enables a user to configure the application to perform the first functionality in response to user input received to the GUI element without requiring the user to create program code to implement the first functionality (col. 10, lines 42-45 "a list of predefined components (objects) that can be interconnected").

24. **Regarding Claims 5-6, 10-13, 34-35 and 39-42:** The rejections of the appropriate parent claims are incorporated, further;

Stutz discloses said configuring the binding between the GUI element and the control enables a user to configure the application to perform the first functionality in response to user input received to the GUI element (col. 11, lines 42-52 "Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509").

25. Further these claims add limitations wherein the control performs various test executive functionalities not disclosed in Stutz.

26. Grey teaches that each of the claimed functionalities was known (see e.g. cols. 1-2), and it would have been obvious to provide these functionalities in Stutz's code objects (Fig. 5) in order to create a fully functional test executive application.

27. **Regarding Claims 7, 36:** The rejections of claims 1, 31 are incorporated, respectively; further

Grey teaches the test executive application is operable to execute a test executive sequence to perform one or more tests on one or more units under test (Abstract "execution of test sequences").

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28. **Regarding Claims 8, 37:** The rejections of claims 1, 31 are incorporated, respectively; further

Grey teaches the test executive application comprises a run-time operator interface application for a test executive sequence (col. 2, lines 6-10 "Run-time Operator Interface").

29. **Regarding Claims 9, 38:** The rejections of claims 8, 37 are incorporated, respectively; further

wherein the test executive sequence is associated with a test executive environment (col. 13, lines 32-33 "The TestStand Test Executive Engine 220 is used for creating, editing, executing, and debugging sequences.");

wherein the control is operable to call the test executive environment during execution of the run-time operator interface application to perform one or more of managing execution of the test executive sequence and/or displaying information regarding execution of the test executive sequence (col. 13, lines 39-41 "The user can call the Engine API from any programming environment").

30. **Regarding Claims 14, 43:** The rejections of claims 1, 31 are incorporated, respectively; further

Stutz discloses the control comprises a standalone software component (col. 8, lines 11-13 "event handling using application independent object interfaces").

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31. **Regarding Claims 15, 44:** The rejections of claims 1, 31 are incorporated, respectively; further

Stutz discloses the GUI element appears on a graphical user interface of the test executive application during execution of the test executive application (col. 11, lines 37-40 “the open file dialog box”);

wherein the GUI element is operable to receive user input to the graphical user interface / display information on the graphical user interface during execution of the test executive application (col. 11, lines 37-40 “the open file dialog box operates by responding to ... user input”).

32. **Regarding Claims 16, 45:** The rejections of claims 15, 44 are incorporated, respectively; further

Looking to Stutz's Code Objects 504-507 in Fig. 5, the term “Code Object” itself as well as the fact that Code Objects 504-507 are depicted outside of Open File Dialog Box 503 indicates that the control does not appear on the graphical user interface of the test executive application during execution of the test executive application.

33. **Regarding Claims 17, 46:** The rejections of claims 1, 31 are incorporated, respectively; further

Stutz discloses the control is a pre-existing control provided by an application development environment used to create the test executive application (col. 10,

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lines 42-45 “a list of predefined components (objects) that can be interconnected”).

34. Regarding Claims 18, 47: The rejections of claims 17, 46 are incorporated, respectively; further:

Stutz discloses both the application development environment and the control (col. 10, lines 42-45 “visual programming environment ... list of predefined components”) “implemented on a computer system” (col. 9, lines 15-21). Accordingly, both the application development environment and the control must have been installed on the computer system.

35. Regarding Claim 20: The rejection of claim 1 is incorporated; further comprising:

displaying a graphical user interface of an application development environment (col. 10, lines 42-45 “A visual programming environment”);

wherein the graphical user interface of the application development environment provides access to the GUI element and the control (col. 10, lines 42-45 “A visual programming environment typically includes a list of predetermined components”);

wherein said including the GUI element in the test executive application in response to user input comprises including the GUI element in the test executive application in response to user input to the graphical user interface of the

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application development environment (col. 11, lines 5-8 "Using the various commands provided by the buttons in the command area 502");

wherein said including the control in the test executive application in response to user input comprises including the control in the test executive application in response to user input to the graphical user interface of the application development environment (col. 11, lines 5-8 "Using the various commands provided by the buttons in the command area 502").

36. **Regarding Claims 21 and 49:** Claims 21 and 49 recite the same limitations as claim 53 and are rejected accordingly.

37. **Regarding Claims 22, 50:** The rejections of claims 1, 31 are incorporated, respectively; further

Stutz discloses said configuring the binding between the GUI element and the control comprises performing one or more calls to bind the GUI element to the control during execution of the test executive application (col. 15, lines 49-52 "The function SetUpConnection ... connects the appropriate notification interface").

38. **Regarding Claims 23, 51:** The rejections of claims 1, 31 are incorporated, respectively; further

wherein said configuring the binding between the GUI element and the control is performed in response to receiving user input to a graphical user

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interface to specify the binding between the GUI element and the control (col. 11, lines 5-8 "Using the various commands provided by the buttons in the command area 502").

39. **Regarding Claim 24:** The rejection of claim 1 is incorporated; further comprising:

Stutz discloses executing the test executive application (col. 11, lines 37-40 "the open file dialog box operates by responding to particular system events"; clearly the application is executing);

receiving user input to the GUI element during execution of the test executive application (col. 11, lines 37-40 "the open file dialog box operates by responding to ... events raised from user input"); and

the control performing the first functionality in response to said receiving user input to the GUI element (col. 11, lines 42-52 "Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509").

40. **Regarding Claim 25:** The rejection of claim 1 is incorporated; further

Stutz discloses said including the GUI element in the test executive application comprises enabling the test executive application to utilize the GUI element during execution of the test executive application (col. 11, lines 37-40 "the open file dialog box operates by responding to ... events raised from user input");

wherein said including the control in the test executive application comprises enabling the test executive application to utilize the control during execution of the test executive application (col. 11, lines 42-52 "Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509").

41. **Regarding Claim 26:** The rejection of claim 1 is incorporated; further

wherein said including the GUI element in the test executive application in response to user input comprises displaying the GUI element on a graphical user interface of the test executive application in response to user input (col. 11, lines 37-40 "the open file dialog box operates by responding to ... events raised from user input").

42. **Regarding Claim 27:** The rejection of claim 1 is incorporated; further comprising:

configuring one or more properties of the control in response to user input (col. 13, lines 49-53 "a sink object can be connected to one or more connection point objects").

43. **Regarding Claim 28:** The rejection of claim 27 is incorporated; further:

Stutz discloses displaying a property panel for configuring the control; (Fig. 5, 502)

and receiving user input to the property panel to configure the one or more properties of the control (col. 11, lines 5-11 "Using the various commands provided by the buttons in the command area 502, a visual programmer has connected the output port 516 of the open file dialog box object 503 ... to code objects").

44. **Regarding Claim 29:** The rejection of claim 1 is incorporated; further Stutz discloses the control is a first control (col. 11, lines 15-17 "the code object 504");

wherein the method further comprises including a second control in the test executive application in response to user input, wherein the second control includes pre-existing second functionality (col. 11, lines 11-15 "multiple selection list box object 509");

wherein said first control performing the first functionality includes the first control invoking the second control to perform the second functionality (col. 11, lines 11-15 "code for updating the list of files shown in the multiple selection list box object 509").

45. **Regarding Claim 30:** The rejection of claim 1 is incorporated; further Stutz discloses:

wherein the GUI element comprises one or more of: a button; a text input element; a check box; a selection ring (col. 11, lines 28-31 "button object 510").

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46. **Regarding Claim 52:** The rejection of claim 31 is incorporated; further Stutz discloses:

executing the test executive application (col. 11, lines 37-40 "the open file dialog box operates by responding to particular system events"; clearly the application is executing);

the control performing the first functionality during execution of the test executive application, wherein said control performing the first functionality comprises the control generating the first information (col. 11, lines 42-52 "Upon receiving this selection event ... The code object 504 ... sends an updated file list to the multiple selection list box object 509"); and

the GUI element displaying the first information generated when the control performs the first functionality (col. 11, lines 42-52 "code for updating the list of displayed files").

47. **Claims 19 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,485,617 to Stutz et al. (Stutz) in view of US 6,401,220 to Grey et al. (Gray) further in view of US 6,718,534 to Carter et al. (Carter).**

48. **Regarding Claims 19, 48:** The rejections of claims 17, 46 are incorporated, respectively; further comprising:

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Stutz discloses both the application development environment and the control (col. 10, lines 42-45 "visual programming environment ... list of predefined components") "implemented on a computer system" (col. 9, lines 15-21). Accordingly, both the application development environment and the control must have been installed on the computer system.

49. The Stutz-Grey combination does not disclose installing the control on the computer system after installing the application development environment.

50. Carter teaches installing a control after installing an application development environment (col. 6, lines 3-5 "The user can import a control from an external source").

51. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of the Stutz-Grey combination in order to avoid "replication of the control programmability function" and the associated Duplication of work and increased cost. (Carter col. 1, lines 48-52)

52. **Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,485,617 to Stutz et al. (Stutz) in view of US 6,240,544 to Kaneko (Kaneko).**

53. **Regarding Claim 75:** This claim recites a method for creating software applications as recited in claim 70, with the exception that the methods recited in claim 75 is used to “a simulation application to perform a simulation function”.

54. Kaneko teaches that such simulation applications were know in the art (Title “Simulation System”).

55. It would, at least, have been obvious to a person of ordinary skill in the art at the time of the invention to use the method disclosed in Stutz to create a simulation application to perform a simulation function as taught by Kaneko (col. 3, lines 18-21 “a simulation system which allows a user to undo instruction two or more times”) because Stutz discloses an improved method ... for dynamically generating object connections” (col. 8, lines 14-17).

Conclusion

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason Mitchell
12/15/06



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